Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An electronic impulse circuit for a device having a power circuit having a line, neutral and ground, a transmitter having outputs to a loop antenna having two inputs,

the electronic impulse circuit comprising:

a) a power impulse protection circuit interconnecting power circuit line and neutral to power circuit ground;

b) a loop impulse protection circuit interconnecting one input of the loop antenna to said antenna ground together with;

c) a heavy ground interconnecting said power circuit ground and said loop antenna ground, said heavy ground having a relatively large cross-sectional area to withstand large lightning surges and a relatively short length to reduce impedance of the interconnection to ground to a minimum value.

2. (Original) The impulse circuit of claim 1 characterized in that the heavy ground is connected to an earthed ground.

3. (Original) The impulse circuit of claim 1 characterized in that the impulse protection for the loop antenna is on a printed circuit board with a maximized trace width for such impulse protection.

4. (Currently amended) The impulse circuit of claim 1 characterized in that the heavy ground ~~is~~ for the one input of the loop antenna is on a printed circuit with a maximized trace width.

5. (Currently amended) The impulse circuit of claim 3 characterized in that the heavy ground ~~is~~ for the one input of the loop antenna is on a printed circuit with a maximized trace width.

6. (Original) The impulse circuit of claim 3 characterized in that the heavy ground interconnection to one input of the loop antenna includes a 1-2 inch length of from 16-12 gauge wire.

7. (Original) The impulse circuit of claim 6 characterized 16-12 gauge wire also forms part of the impulse protection circuit for one input of the loop antenna.

8. (Original) The impulse circuit of claim 1 characterized in that the impulse protection circuit the one input of the loop antenna includes a gas tube bridging the one input of the loop antenna to the heavy ground.

9. (Original) The impulse circuit of claim 8 characterized in that the impulse protection circuit of the output of the transmitter includes a resistance to the gas tube.

10. (Canceled)

11. (Currently amended) An electronic impulse circuit for a device having a power circuit having a line, neutral and ground, a transmitter having two output terminals and a loop antenna having two inputs,

the electronic impulse circuit comprising:

a) an impulse protection circuit interconnecting power circuit line and neutral to power circuit ground;

b) an impulse protection circuit interconnecting one output of the transmitter to power circuit ground;

c) an impulse protection circuit interconnecting one input of the loop antenna to power circuit ground together with;

d) a heavy ground interconnecting power circuit ground and one output of the transmitter and one input of the loop antenna, said heavy ground having a relatively large cross-sectional area to withstand large lightning surges and a relatively short length to reduce impedance of the interconnection to ground to a minimum value.

12. (Original) The impulse circuit of claim 11 characterized in that the heavy ground is connected to an earthed ground.

13. (Original) The impulse circuit of claim 11 characterized in that the impulse protection for the loop antenna is on a printed circuit board with a maximized trace width for such impulse protection.

14. (Currently amended) The impulse circuit of claim ~~1~~ 11characterized in that the heavy ground for the one input of the loop antenna is on a printed circuit with a maximized trace width.

15. (Original) The impulse circuit of claim 13 characterized in that the heavy ground for the one input of the loop antenna is on a printed circuit with a maximized trace width.

16. (Original) The impulse circuit of claim 13 characterized in that the heavy ground interconnection to one input of the loop antenna includes a 1-2 inch length of from 18-10 gauge wire.

17. (Original) The impulse circuit of claim 16 characterized 18-10 gauge wire also forms part of the impulse protection circuit for one input of the loop antenna.

18. (Original) The impulse circuit of claim 11 characterized in that the impulse protection circuit the one input of the loop antenna includes a gas tube bridging the one input of the loop antenna to the heavy ground.

19. (Original) The impulse circuit of claim 18 characterized in that the impulse protection circuit of the output of the transmitter includes a resistance to the gas tube.

20. (Canceled)